

CentralTM Semiconductor Corp.

DESCRIPTION:
 The CENTRAL SEMICONDUCTOR CMPT651 type is a high current NPN Silicon Transistor, epoxy molded in a space saving Power SOT-23F surface mount package, designed for high current applications.
 Marking code is **C651**.

MAXIMUM RATINGS: (T_A=25°C)

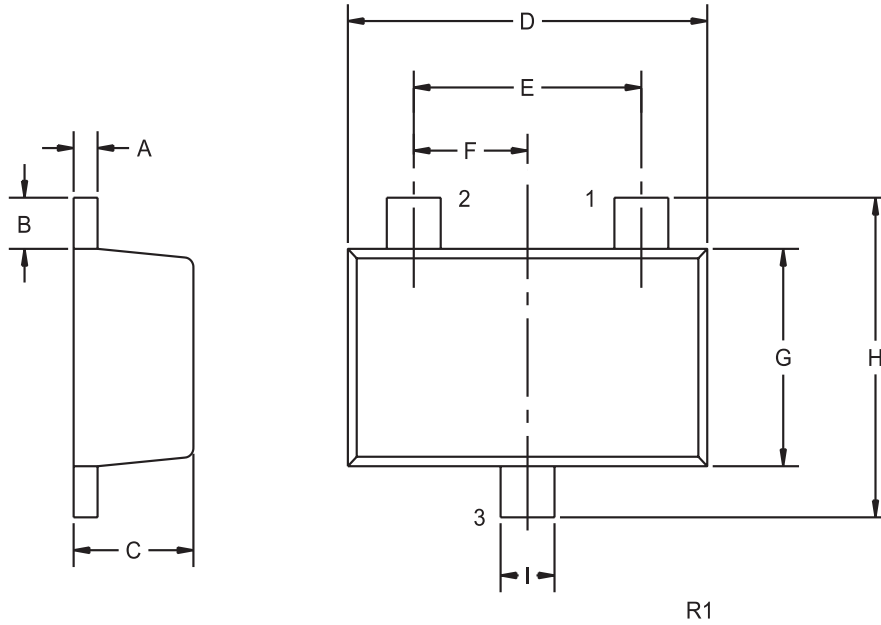
	SYMBOL		UNITS
Collector-Base Voltage	V _{CBO}	80	V
Collector-Emitter Voltage	V _{CEO}	60	V
Emitter-Base Voltage	V _{EBO}	5.0	V
Collector Current	I _C	2.0	A
Power Dissipation	P _D	350	mW
Operating and Storage			
Junction Temperature	T _J , T _{stg}	-65 to +150	°C
Thermal Resistance	θ _{JA}	357	°C/W

ELECTRICAL CHARACTERISTICS: (T_A=25°C)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I _{CBO}	V _{CB} =80V		100	nA
I _{EBO}	V _{EB} =4.0V		100	nA
BV _{CBO}	I _C =100μA	80		V
BV _{CEO}	I _C =10mA	60		V
BV _{EBO}	I _E =10μA	5.0		V
V _{CE(SAT)}	I _C =0.5A, I _B =50mA		100	mV
V _{CE(SAT)}	I _C =1.0A, I _B =100mA		200	mV
V _{CE(SAT)}	I _C =2.0A, I _B =200mA		400	mV
V _{BE(SAT)}	I _C =1.0A, I _B =100mA		1.2	V
V _{BE(ON)}	V _{CE} =2.0V, I _C =1.0A		1.0	V
h _{FE}	V _{CE} =2.0V, I _C =50mA	75		
h _{FE}	V _{CE} =2.0V, I _C =500mA	100	300	
h _{FE}	V _{CE} =2.0V, I _C =1.0A	75		
h _{FE}	V _{CE} =2.0V, I _C =2.0A	40		
f _T	V _{CE} =5.0V, I _C =50mA, f=100MHz	75		MHz

**SURFACE MOUNT
NPN HIGH CURRENT
TRANSISTOR**

SOT-23F CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) Base
- 2) Emitter
- 3) Collector

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.004	0.008	0.10	0.20
B	0.012	0.020	0.30	0.50
C	0.031	0.039	0.80	1.00
D	0.110	0.118	2.80	3.00
E	0.075		1.90	
F	0.037		0.95	
G	0.059	0.067	1.50	1.70
H	0.091	0.098	2.30	2.50
I	0.014	0.018	0.35	0.45

SOT-23F (REV: R1)